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BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
Commissioner - Chairman
RENZ D. JENNINGS
Commissioner
CARL J. KUNASEK
Commissioner

IN THE MATTER OF THE COMPETITION IN THE PROVISION OF ELECTRIC SERVICES THROUGHOUT THE STATE OF ARIZONA.	DOCKET NO. RE-00000C-94-0165 **NOTICE OF FILING**

Pursuant to the Procedural Conference held on January 23, 1998, Tucson Electric Power Company hereby files the Rebuttal Testimonies and Summaries for Charles E. Bayless, Daniel Wm. Fessler and Kenneth Gordon, in the above captioned matter.

RESPECTFULLY SUBMITTED this 4th day of February, 1998.

TUCSON ELECTRIC POWER COMPANY

By: _____

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Arizona Corporation Commission
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FEB 04 1998

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By: Sandy Waters

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
Commissioner - Chairman
RENZ D. JENNINGS
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CARL J. KUNASEK
Commissioner

IN THE MATTER OF THE COMPETITION IN THE PROVISION OF ELECTRIC SERVICES THROUGHOUT THE STATE OF ARIZONA.	)	DOCKET NO. RE-00000C-94-0165
	)	**SUMMARY OF REBUTTAL TESTIMONY**
	)	Charles E. Bayless, Daniel Wm. Fessler, and Kenneth Gordon

On Behalf of

TUCSON ELECTRIC POWER COMPANY

FEBRUARY 4, 1998

REBUTTAL TESTIMONY OF CHARLES E. BAYLESS
SUMMARY

In my rebuttal testimony, I express concern that almost all of the other parties to this proceeding, to promote their own self-interests, have ignored the history of regulation in Arizona; including the regulatory compact. Any stranded cost recovery program must be adaptable to all Affected Utilities, taking into consideration their respective financial condition and other circumstances. Although I am a strong advocate of competition in the electric utility industry, I believe that key issues, including but not limited to stranded costs, access to transmission systems, responsibility for reliability management and defining the continuing role of regulatory agencies, must accompany the change from regulation to competition.

I discuss the fact that Affected Utilities should not have to forego recovery of capital investment in facilities, simply because the facilities were built when legislation was encouraging the use of coal and other alternate fuels, in lieu of natural gas and petroleum. Because TEP was required to build facilities to serve their past, present and future needs, the Commission should provide the *opportunity* for recovery of 100 percent of its stranded costs. Less than full recovery will precipitate write-offs and potentially leave TEP in a very weak financial position going into competition. Also, TEP's shareholders cannot and should not absorb the write-offs proposed by the intervenors. If TEP does not receive full recovery of stranded costs, it will be forced to take its case to the courts, thus forestalling competition.

I discuss the proposed "revenues lost" approach versus the proposed replacement cost approach to stranded cost quantification. Even though my proposal of using the Dow Jones Palo Verde Index ("PVI") was not well received, I still believe the PVI is the best available representation of the market price of power prices in the region. TEP is also willing to consider the auction and divestiture recovery, but only if TEP is guaranteed *full recovery of all* of its regulatory assets, as well as the positive difference between book and market value from the sale of its generation assets.

Regarding securitizing a portion of TEP's stranded costs, I believe that securitization makes good on society's commitment to allow the opportunity for cost recovery with the new game rules. Securitization creates savings that are achieved by

substituting the utility's debt and equity capital with lower cost securitized debt capital. The cost savings will benefit customers and will speed up the transition to competition.

Finally, the length of the recovery period should be sufficient to allow for recovery of stranded costs. TEP has demonstrated that it is willing to mitigate stranded costs while other parties in this proceeding claim that the Affected Utilities have no incentive to mitigate if they receive their stranded costs. This is simply wrong.

REBUTTAL TESTIMONY OF DANIEL WM. FESSLER

SUMMARY

In this rebuttal testimony, I respond to the position taken by several witnesses that the regulatory compact or contract is a recently invented, self-serving concept devised by the Affected Utilities to justify recovery of stranded costs. In my rebuttal testimony I assert that the continued attempts to deny the existence of such a bargain threaten to mire the Commission's goal of introducing competition in generation by January 1, 1999 in federal and state litigation. I also contend that a failure of the Commission Rules and implementation policy to provide the Affected Utilities with a comparable reasonable opportunity to recoup 100 percent of their investments in: i) generation plants admitted to ratebase, ii) pass through the costs of previously formed power and fuel purchase contracts, and iii) regulatory assets, will provide the utilities with well founded claims of impairment of the regulatory contract and an impermissible taking of a vested property right.

In support of these contentions, I draw the Commission's attention to both classical and recent decisions establishing the fact that the regulatory contract has been recognized and defined by the United States and Arizona Supreme Courts.

The second aspect of my rebuttal testimony focuses on the consequences of the regulatory contract to the Commission's efforts to extinguish the vertically integrated monopoly features of the existing certificates of convenience and necessity and introduce competition in generation. I contend that state and federal constitutional protections do not prohibit this sweeping reform provided that the plan and its implementation strategies include a mechanism that is comparable to the reasonable opportunity afforded utilities under cost of service ratemaking to recoup their investments in ratebase, pass through costs associated with fuel and power purchases and recovery of their regulatory assets.

I next address the contention of several witnesses that the Commission Rules should be amended to create some sharing formula to apportion revenue losses resulting from the introduction of competition between utility shareholders and ratepayers. My position is that such a provision would flunk the comparability test by design, triggering certain impairment and takings litigation.

I conclude by refuting the Staff contention that a provision in the Commission's Competition Rules, which would permit securitization of the lost revenues, is contrary to the interest of ratepayers. I show that securitization may well lower the financing costs, while permitting an extension of the time frame over which a competition transition charge is collected from Arizona ratepayers. It is within the ability of the Commission to design a securitization plan that promotes generational equity without endangering the introduction of competition or risking over-collection of estimated lost revenues.

REBUTTAL TESTIMONY OF KENNETH GORDON

SUMMARY

My name is Kenneth Gordon. I am Senior Vice President of National Economic Research Associates, Inc. (NERA). My business address is One Main Street, Cambridge, MA 02142. I filed direct testimony in this case before the Arizona Corporation Commission (ACC) on behalf of Tucson Electric Power Company (TEP). The purpose of my rebuttal testimony is to respond to certain arguments and assertions made in testimony that was filed on January 21, 1998 by a number of parties representing a diverse group of interests.

In my rebuttal testimony, I make the following points, among others:

- The term "regulatory compact" is a shorthand way of referring to the understanding between regulators and investors that regulators afford an opportunity to recover all prudently incurred costs, in exchange for the utility assuming an obligation to serve all customers who want service, at rates that cover the cost of capital but do not allow the firm to earn economic profits. My testimony is that utility investors should be given a reasonable opportunity to recover 100 percent of their stranded costs - not that they should be guaranteed recovery of 100 percent of stranded costs.
- Regulators and policymakers are now and always have been free to alter the terms of the regulatory compact on a going-forward basis - and I am a long-time advocate of doing so through the adoption of performance-based regulation, and, even more importantly, through the introduction of competition - but it is inappropriate to ignore the past or apply the substantive standards of the new, competitive model to previous arrangements that were consummated under the soon-to-be discarded standards of rate-base regulation.
- Proposals to share the responsibility for stranded cost recovery 50/50 between ratepayers and shareholders have a certain "split the baby" surface appeal to them, but these proposals are not derived from a reasonable reading of the historic record and the precedent established over many years of traditional ratemaking. Splitting the difference is not justice when anything less than an opportunity to recover 100 percent of stranded costs represents an abrogation of existing commitments.
- Securitization is simply a way to convert a portion of any reasonably estimated stranded costs into a marketable security. Investors are likely to require a smaller risk premium for these securities and thus the capital carrying costs could be lower. Lower capital costs reduce the total stranded costs that customers must pay for.

- Stranded cost recovery can be achieved in ways that have virtually no impact on efficient, going-forward competition in the generation market. Indeed, avoiding deleterious effects on the new generation market is one of the most important goals established by policy-makers in those states that have made significant progress toward the creation of a competitive electricity market. Policy-makers in these states have recognized that, whatever has happened in the past, competition in the generation market should be unimpeded on a going-forward basis. Stranded cost recovery can and has been designed in such a way as to allow the market to clear the price for generation in other markets. There is no reason to believe that the ACC cannot do the same. The "net revenues lost" approach is one such way to accomplish this goal.

- I firmly believe that the Massachusetts Commission's early and unequivocal pledge to honor existing commitments was the primary reason that customer choice will now become a reality in that state. Compare that situation to New Hampshire, which in some ways was moving faster than Massachusetts but is now mired in litigation primarily because there is not a similar commitment to an opportunity for full stranded cost recovery. The ACC is at a critical juncture where it can follow the New Hampshire path of litigation and delay, with little prospect of ultimately winning the battle in my opinion, or the Massachusetts path of cooperation and progress toward solving the implementation details of introducing customer choice so that the residents of Arizona can receive the benefits of competition in generation as soon as possible.

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
Commissioner - Chairman
RENZ D. JENNINGS
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IN THE MATTER OF THE COMPETITION IN THE PROVISION OF ELECTRIC SERVICES THROUGHOUT THE STATE OF ARIZONA.	) DOCKET NO. RE-00000C-94-0165)) **REBUTTAL TESTIMONY**) Charles E. Bayless, Daniel Wm. Fessler,) and Kenneth Gordon

On Behalf of

TUCSON ELECTRIC POWER COMPANY

FEBRUARY 4, 1998

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
Commissioner - Chairman
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IN THE MATTER OF THE COMPETITION IN THE PROVISION OF ELECTRIC SERVICES THROUGHOUT THE STATE OF ARIZONA.	DOCKET NO. RE-00000C-94-0165
	REBUTTAL TESTIMONY Charles E. Bayless, Daniel Wm. Fessler, and Kenneth Gordon

On Behalf of

TUCSON ELECTRIC POWER COMPANY

FEBRUARY 4, 1998

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
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IN THE MATTER OF THE COMPETITION IN THE PROVISION OF ELECTRIC SERVICES THROUGHOUT THE STATE OF ARIZONA.	) DOCKET NO. RE-00000C-94-0165)) **REBUTTAL TESTIMONY OF**) **CHARLES E. BAYLESS**)

On Behalf of
TUCSON ELECTRIC POWER COMPANY

FEBRUARY 4, 1998

TABLE OF CONTENTS

I. INTRODUCTION AND PURPOSE

Q. Please state your name and business address.

A. Charles E. Bayless, 220 West Sixth Street, Tucson, Arizona 85701.

Q. Are you the same Charles E. Bayless that filed direct testimony in this proceeding?

A. Yes.

Q. What is the purpose of your rebuttal testimony in this proceeding?

A. I will present Tucson Electric Power Company's ("TEP" or "Company") view concerning several major issues that have been addressed by other parties participating in this generic hearing on stranded costs.

Q. How is your rebuttal testimony organized?

A. Instead of responding to each and every party that filed direct testimony, my testimony attempts to group the predominate positions taken and respond accordingly from TEP's perspective. Although I do have some specific rebuttal, the fact that TEP has not addressed a specific position taken by a particular party should not be construed as TEP's agreement or acceptance of such position.

II. GENERAL COMMENTS

Q. Would you care to make any general comments regarding the testimony that was filed by other parties to this proceeding?

A. Yes. First, I am very concerned that practically all the parties to this proceeding, in an effort to promote their own self-interests, have ignored the history of regulation in Arizona. Additionally, I believe that any stranded cost recovery program must be adaptable to all Affected Utilities, taking into consideration their respective financial conditions and other circumstances. In TEP's proposal, as outlined in my direct testimony, the Company attempted to put forth a proposal that is consistent with this philosophy.

Q. At least one party has suggested that you are advocating competition outside the state, but are attempting to slow the process in Arizona.[1] How do you respond to this criticism?

A. For those that suggest I am for competition nationally, but am attempting to slow competition within the state, my position has and continues to be very consistent. I am a strong advocate

[1] Ogelsby, page 16, lines 2-4.

of competition in the electric utility industry, but believe that key issues including stranded cost recovery, access to transmission systems, responsibility for reliability management and the role of regulation, must be adequately addressed. If these issues are not properly dealt with, continued regulation would be best for society.

I do not believe that these key issues have been effectively resolved in Arizona although we have spent much time discussing them. Holding open discussions where various parties offer their opinions will not result in solutions to the issues. It merely has provided a forum for discussion. Key issues must be resolved before we will ever be able to open the markets. As seen in California, the implementation stage is complex and time consuming.

III. GENERATION ISSUES

Q. Please discuss the historical events relating to generation that brought us where we are today.

A. Most parties have ignored relevant historical events that created the current generation situation that utilities are facing today (*i.e.*, high generation capital costs relative to current market prices). The type of units in rate base today are exactly the type of generating units that Congress wanted to see installed in the 1970's and 80's. This was obvious given the passage of the Fuel Use Act ("FUA"). In fact, the FUA specifically states that a major purpose of the legislation was "to encourage and foster the greater use of coal and other alternate fuels, in lieu of natural gas and petroleum, as a primary energy source." Utilities were encouraged to substitute capital expense for "expected" fuel savings because of the expectation that natural gas and petroleum would either be in short supply and/or too costly.[2] Several of the intervenors in this proceeding seem to be saying that since forecasts of natural gas and petroleum prices turned out to be well below expected prices, utilities should have to forego recovery of capital investment in facilities specifically designed to effect "expected" fuel savings. I submit that if gas and oil prices were currently at levels expected in the 1970's and 80's, these same parties would be telling the Commission what a wonderful job the utilities had done by investing in capital intensive base-load facilities.

[2] This is the potential moral hazard that Dr. Rose discusses on page 10 of his testimony. "A moral hazard can be created when, for example, a government agency, usually inadvertently, encourages firms or individuals to act in a manner that is not in the general public's best interest."

Q. Dr. Rose indicates at lines 17-21 on page 9 of his direct testimony, that a move to competition will offer advantages to most utilities because most of their sunk investment "has been substantially recovered." Is this statement true for TEP?

A. Absolutely not. TEP has several generating units, which account for 1,234 MW out of a total of 1,952 MW, that still have at least 15 years remaining in their useful lives. The newest units, Springerville 1 and 2, have remaining lives of 27 and 32 years respectively. These two units alone account for more than a third of TEP's installed generating capability and nearly 70 percent of TEP's net production book value.

IV. THE REGULATORY COMPACT AND STRANDED COST RECOVERY

Q. Do you have any comments regarding Dr. Rose's claim that a regulatory compact never existed?

A. It is bewildering that Dr. Rose believes there was never an implied contract between utilities and the customers they served and *are still serving*. As I mentioned in my direct testimony, utilities were (and still are) *required* to plan for and provide generation for all current and future customers. The Commission has a lengthy set of constitutional provisions, statutes and administrative rules which govern the conduct of utilities and customers in the provision and receipt of electric service. The statutes and rules obligate the utility to provide (with little exception) service to each and every customer in its geographic territory as set forth in its Certificate of Convenience and Necessity ("CC&N"). As Dr. Fessler details in his rebuttal testimony, the implications of this relationship have been clearly defined. Very simply, the utility has no choice of whether or not it provides service to a customer, nor does it have the ability to determine the charges for such service.

Utilities are required to build plants and provide service. In exchange for pervasive regulation, the Commission provides the utility the *opportunity* to recover its prudently incurred costs and earn a reasonable return on investment thereon. If competition in the electric industry had not emerged, regulators and utilities would continue this regimen as they have for almost 100 years and utilities would, in time, recover 100 percent of their prudent investment. To suggest now that the obligation to serve never existed is disingenuous at best. Stranded costs are a result of moving from a regulated to a competitive model. The Commission should keep its end of the compact, contract (or banana as Ken

Gordon alludes) and provide for the recovery of 100 percent of its stranded costs before it moves on to a new paradigm.

Q. Do you agree with Mr. Nelson's assertion that the courts in Arizona have determined that there is no regulatory compact?

A. No. Those decisions do not state that the regulatory compact does not exist. My interpretation of these minute entries, as President and CEO of TEP, is merely that the regulatory compact does not form the basis of a contract that prohibits the Commission from altering or amending the CC&N. The minute entries are completely silent as to the application of a stranded cost analysis to the regulatory compact.

Q. How do you respond to those parties that advocate less than 100 percent stranded cost recovery?

A. Various parties in this proceeding, for which TEP was required to build facilities to serve their past, present and future needs, are now advocating that the Commission should not permit 100 percent stranded cost recovery. Stranded costs are the end result of a move to competition from the regulatory model. They are not new costs, but costs currently collected in rates. When intervenors ask that TEP shareholders accept responsibility for stranded costs imposed by competition, they are effectively asking for a transfer of shareholder wealth to customers.

Q. What are the implications of less than 100 percent stranded cost recovery for TEP?

A. Since its 1992 restructuring, TEP has been able to achieve about 15 percent positive equity. Less than full recovery will precipitate more write-offs under FAS 71 and leave TEP in a very weak position. The implications of FAS 71 have been fully covered in the direct testimony of Karen G. Kissinger. Given TEP's financial condition, our shareholders cannot, and should not, absorb the write-offs that will most likely occur if the Commission adopts the recommendations of those parties that advocate less than 100 percent recovery of stranded costs. Moreover, it is interesting to note that nearly all of the parties in this proceeding have either had no opinion, or have deliberately shied away from the accounting implications under FAS 71 of less than 100 percent stranded cost recovery. The accounting implications of FAS 71 are very serious. As correctly pointed out by Ms. Hubbard at lines 19-21, page 6 of her direct testimony, no one can say with certainty what the accounting implications are

until a regulated cash inflow is determined. TEP would urge the Commission to very carefully consider any recommendations in this proceeding that would require less than 100 percent stranded cost recovery as it relates to FAS 71. If TEP does not receive full recovery of stranded costs, it has only one option and that is to take its case to the courts, which will inevitably forestall competition.

Q. Does 100 percent stranded cost recovery for the utility benefit society as a whole?

A. Yes. In presenting the OLDCO, NEWCO scenario, TEP used a simple example to clarify and articulate why society is better off by recovering stranded costs. In spite of TEP's attempt to simplify and elucidate this point, several intervenors have either twisted those arguments under different assumptions or misinterpreted them completely. Several intervenors try to compare total costs with marginal costs. From a generation suppliers' perspective, in an efficient competitive market the decision to supply or not to supply has to depend on avoidable costs. This is the same from society's perspective as well; correct decisions about supply from society's perspective should only depend on the avoidable costs of the alternatives, not their sunk costs. As I said in my direct testimony, the regulatory view should be "What is best for society?" for the public good, not "What is best for new entrants?"

Mr. Higgins states in his rebuttal testimony at page 5, lines 9-11, "It will have to write down the asset and/or restructure its financing or ownership, but it will remain in OLDCO's interest to keep operating, given its low marginal costs." Competitive markets price at long-run marginal costs (*e.g.*, the wholesale power market). Ultimately, a competitive retail electric market will operate in this manner as well. The disagreement that I have with Mr. Higgins is the treatment of sunk costs resulting from the regulatory environment.

Q. Were there other issues raised by intervenors concerning uneconomic bypass?

A. Dr. Rose tries to discount the issue of uneconomic bypass (higher cost units running before lower cost units) that I raise in my direct testimony. He quotes Kahn and Wenders in arguing that dynamic efficiency may outweigh the static welfare loss from uneconomic bypass. Both Kahn and Wenders are taken out of context and are speaking about the telecommunications

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industry, not the electric utility industry. Let me quote Baumol, Joskow and Kahn in the correct context, the context of the electric utility industry:[3]

> There have indeed been substantial improvements in short-term productivity achieved in other industries in the process of deregulation; but they provide little support for the hypothesis that there are similarly large opportunities in electric power waiting to be tapped. In telecommunications, the surge in productivity has been almost exclusively technology-driven: microwave, the computer chip, digitalization, fiber optics and so on have made possible very large increases in output per employee as well as an explosion in the variety of service offerings. In the case of the airlines and railroads, there is clear evidence that the cartelization of those industries under regulation sheltered inefficient work practices and inefficient route configurations and employment of equipment; and the greater freedom and competition introduced by deregulation has both permitted and intensified pressures for improvements in both labor and capital productivity. It is difficult to make the case that similar dramatic gains are likely in the electric sector, at least in the short-run.

Wholesale market competition has already exploited most short-run efficiencies in the generation market. In fact, as I mention later, most intervenors are arguing against using the Dow Jones Palo Verde Index ("PVI") price as the market price because it is "too low."

To argue that dynamic efficiency gains will outweigh static efficiency losses in the context of the generation market in this part of the country is just not correct. TEP does not see large additions to capacity being necessary until after the transition period that TEP has proposed for stranded cost recovery. There will be excess capacity in the Western United States for many years to come. The uneconomic bypass of this excess supply of base-load generation will not benefit society.

[3] William J. Baumol, Paul L. Joskow and Alfred E. Kahn. "The Challenge for Federal and State Regulators: Transition from Regulation to Efficient Competition in Electric Power," Edison Electric Institute, December 9, 1994.

As I stated in my direct testimony, TEP favors competition in the retail generation market and we believe the real benefits from competition will come, but not overnight. Only in the long-run when large new capacity additions are needed and when investment decisions can be made in a truly competitive market will we benefit from new technologies and improved efficiencies.

Q. Have investors already been compensated for the risk of stranded costs as stated by several intervenors?

A. Intervenors argue that the regulated rate-of-return includes compensation for the risk of stranded costs. The risk premiums embedded in allowed rates of return on equity have historically reflected the risks associated with a regulated monopoly market structure, not the demand-side risks faced by utilities in a retail wheeling environment. These risks are completely different, and have not been incorporated in allowed rates of return on equity for utilities. The risk premium allowed by regulators would have to be substantially higher in order to compensate shareholders for the increased risk of stranded costs. The risk of stranded assets has increased in recent years, but utilities' authorized returns on equity have remained relatively unchanged. TEP's current authorized return-on-equity is 10.67 percent and a risk premium for stranded costs has never been discussed in TEP's rate proceedings.

For example, utility stocks have under-performed the market in recent years, but as Figure 1 demonstrates, the annual average authorized return on equity has remained relatively unchanged since 1993.[4&5]

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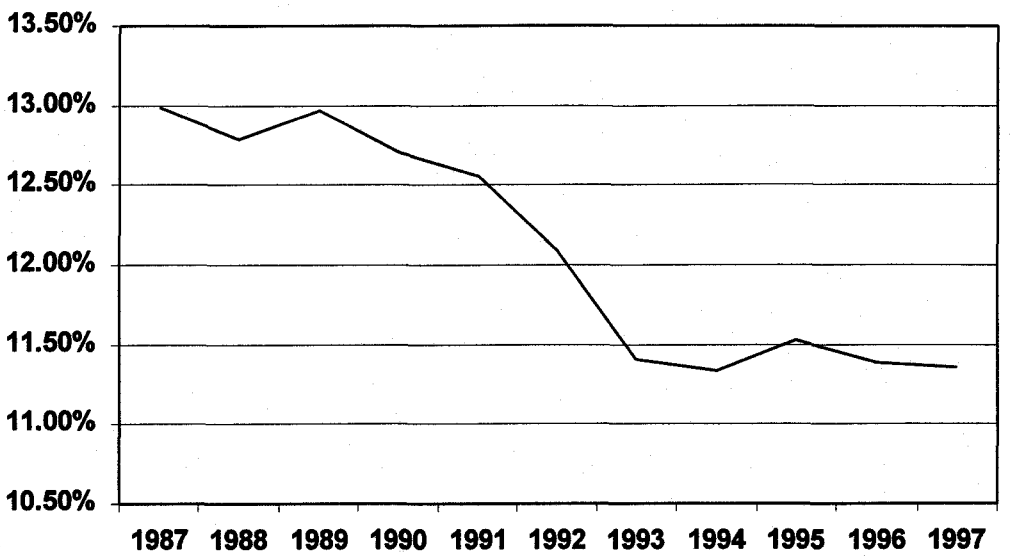
[4] Regulatory Research Associates, Inc. Major Rate Case Decisions, January 21, 1998.

[5] In Dr. Cooper's testimony, page 18, he refers to his Attachment MNC-4 which shows electric utility returns compared to the S&P 400 through 1991. The cumulative electric utility total returns have been significantly lower than the S&P 500 returns for the period 1992 to present.

Figure 1

ELECTRIC UTILITIES

AVERAGE AUTHORIZED RETURN ON EQUITY



The risk of lower earnings due to stranded costs (or the threat of stranded costs) in certain periods can only be compensated for by the opportunity to earn more than the cost of capital in other periods. This has not happened.

V. METHODOLOGY

Q. Why has TEP proposed the "revenues lost" approach?

A. I believe that the revenues lost approach provides a reasonable measure to assess the change in the position of existing regulated utilities before and after the introduction of competition. It avoids potential disputes regarding prior recovery of certain costs and allocations to customers since it uses the existing regulatory model for ratemaking to quantify stranded costs. The support for alternative calculation mechanisms and the aversion towards the revenues lost approach is most likely due to a lack of support for 100 percent stranded cost recovery and/or attempts to solve other issues such as market power.

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Q. Many intervenors propose the replacement cost approach to stranded cost quantification. Do you agree with their views?

A. It is not consistent to value TEP assets, which provide a hedge against fuel price increases, with a technology that increases fuel price risk. As I read the testimony of the customer groups, I could not help but think that they are missing something very important. Dr. Rosen calculates some of the Affected Utilities stranded costs based on replacement cost. In his analysis, he accounts for a potential market risk that I mentioned in my direct testimony, a risk all other intervenors have ignored - the price risk of increasing natural gas prices. Enron president, Jeffrey Skilling, has recently stated that Enron expects "pretty strong" natural-gas prices in 1998 as stockpiles shrink - his expectations are such that Enron has hedged its gas price exposure.[6] The Affected Utilities in this proceeding do not have a lot of natural gas price exposure. TEP, for example, has long-term fixed coal contracts that hedge against the kind of price increases Dr. Rosen used in his analysis. During the transition period that TEP proposed in its direct testimony, customers will receive the full benefits of stable generation prices. If market prices increase, the quantified stranded cost amounts decrease.

As I mentioned in previous testimony, TEP is also willing to consider the auction and divestiture quantification approach, but only if TEP is guaranteed full recovery of regulatory assets and the positive difference between book and market (in the event that book is greater than market). If Dr. Rosen is correct about the market price of electricity and if TEP's generation is divested, customers will not reap the benefits of stable generation prices that they would have during the transition recovery period that TEP proposes.

Q. Your proposal of using the PVI as a proxy for market price for power was not well received. How do you respond to the criticisms?

A. The rhetoric about how the PVI is not the true market price is nothing less than disingenuous. The PVI is the best available representation of the market price of wholesale power prices in the region. As the California Power Exchange ("PX") price develops, so will the PVI price. If the PX price (net of transaction and transmission costs) is different than the PVI price, an

[6] Loren Fox, Dow Jones News, 01-20-98.

unexploited profit opportunity will exist in the generation market and the many market participants will exploit that opportunity via arbitrage.

Q. Several other intervenors, including Dr. Rosen, support that the retail price of electricity will be significantly higher than the wholesale price. Do you agree with this position?

A. No, at least not to the degree Dr. Rosen suggests. Some believe that there will ultimately be a very small number of suppliers in the retail electric business in the future, similar to the current situation with long distance phone service (a handful of large suppliers with a larger number of upstarts moving in and out of the business.) This structure suggests a very high volume, low margin business. I believe that margins will ultimately be significantly less than the 0.77 cents per kWh that Dr. Rosen suggests.

Q. TEP has proposed securitizing a portion of its stranded costs. Please respond to the intervenors' views on securitization.

A. Dr. Rose states that securitization will transfer risk from utilities to customers. I disagree. Securitization makes good on society's commitment to allow the opportunity for stranded cost recovery with the new game rules (*i.e.*, competitive generation). Securitization creates savings that are achieved by substituting the utility's debt and equity capital with lower cost securitized debt capital. This cost savings benefits customers and will speed up the transition to competition.

Q. Please address the length of the recovery and calculation period for stranded costs.

A. Several parties have recommended that the length of the calculation period for stranded costs be limited to a very short time period. Given the magnitude of the Springerville generating assets on TEP's books, the shorter the time frame for calculation of stranded costs, the less likely it will be that TEP can recover all of its stranded costs if rates are to be capped or frozen or if the recovery period is not lengthened significantly. It appears that several of the other parties have failed to take this fact into consideration in their recommendations. Unless a sufficient recovery period is permitted, Affected Utilities, such as TEP, will not have the opportunity to recover their stranded costs.

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Q. Several parties in this proceeding believe that not all customers should be responsible for stranded costs. Do you agree with this assertion?

A. No, I do not. As I stated in my direct testimony, TEP believes that all customers should pay for stranded costs. There should be no exceptions.

VI. MITIGATION

Q. Several parties in this proceeding have claimed that if utilities are granted recovery of stranded costs there will be no incentive to mitigate those costs. Do you agree with this assertion?

A. No. In the "real world," anytime an organization can reduce its cost of doing business, value is added to the firm, its shareholders and existing and prospective customers through lower prices.

Q. Has TEP undertaken any cost mitigation efforts?

A. Yes. TEP has undertaken substantial cost reduction measures over the course of the last several years. TEP has the goal of becoming a "supplier of choice" once the market begins to become competitive and later on when full competition arrives. In order to accomplish this, TEP will need to offer a wide variety of services at the lowest possible prices. TEP will be forced to cut costs. Staff and others would like this Commission to believe that Affected Utilities would do nothing until competition arrives just because they have been given recovery of costs that became, or will become, stranded due to the introduction of competition. This proposition simply does not make any sense.

TEP also has targeted an actual equity ratio of 37.5 percent by the end of the year 2000 as a condition for approval of its holding company. If TEP does not achieve this level of equity, the Commission has the option to impose an amount less than the targeted amount for ratemaking purposes. TEP's actual equity ratio is currently 15 percent. As a result, TEP has a very strong incentive to reduce current costs and thereby improve the equity component of capitalization.

It is simply wrong to assert that utilities have no incentive to mitigate stranded costs before and after the transition to competition. To argue that utilities will have no incentive to mitigate costs is to ignore what competition is all about.

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VII. CONCLUDING OBSERVATIONS

Q. Do you have any concluding observations regarding the testimony that was filed in this proceeding?

A. Yes. First, I believe that unless the Commission provides a clear policy direction as discussed in Messrs. Fessler and Gordon's testimonies, competition will not come to Arizona without producing potentially disastrous consequences. In this proceeding, I note that the proposal of Staff and other intervenors will require amendment of the rules to provide for less than 100 percent stranded cost recovery. The Commission has maintained that it adopted the basic framework for the rules after taking into consideration positions of the various stakeholders and after going through a rulemaking proceeding. What the Commission should be doing now is putting the "meat on the bone" and not going back to change the framework. The rules, as currently in effect, provide that Affected Utilities *shall* recover their stranded cost. Presumably, this was to provide the Affected Utilities, their shareholders, the SEC and the financial community, some degree of certainty with respect to how stranded costs would be treated in Arizona. The Commission should not change this basic framework this late in the process. To go through a contentious rulemaking proceeding after this hearing almost guarantees additional litigation and will create more confusion, uncertainty and dissent.

Second, some parties are using the issue of stranded cost recovery as the basis to seek relief on the backs of utility shareholders for societal problems. For example, the Land and Water Fund's proposal that to the extent Affected Utilities do not meet renewable goals established prior to competition under traditional regulation, that stranded costs be reduced and the amount be added to the Systems Benefits Charge. Despite the fact that the rules contain a solar portfolio standard and that the Systems Benefits Charge is specifically designed to fund renewable, environmental, DSM and other programs, Affected Utility shareholders would have another stick held over their heads under this proposal.

The Arizona School Boards Association wants an exemption for the stranded cost charge for Arizona schools. Although TEP is sympathetic to the problems of school funding in Arizona, the legislature is the appropriate forum to address this problem.

Further, any potential rate reductions associated with this process should not be funded by utility shareholders. In California, for example, the rate reduction for residential

and small commercial customers was part of the stranded cost bonds that were issued so that all customers would fund the reduction.

Let me reiterate that TEP believes that competition, implemented properly will bring benefits to society. However, based upon the testimony filed in this proceeding, it is the utility shareholders who are being asked to bear a disproportionate burden of the implementation costs. If the Commission is serious about bringing competition, it needs to get on with it in a fair and equitable manner. The regulatory compact has served as the basis of regulation for almost 100 years. The utilities, which have performed their end of the bargain, must not be abandoned now. TEP shareholders have already taken hundreds of millions of dollars in write-offs under regulation. It has charged a regulated rate, accepted only a regulated rate-of-return and has served all its customers. During the transition to competition, TEP is willing to reasonably mitigate, but is entitled to have the *opportunity* to recover 100 percent of its stranded costs.

Q. Does this conclude your testimony?

A. Yes.

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
Commissioner - Chairman
RENZ D. JENNINGS
Commissioner
CARL J. KUNASEK
Commissioner

IN THE MATTER OF THE COMPETITION IN THE PROVISION OF ELECTRIC SERVICES THROUGHOUT THE STATE OF ARIZONA.	DOCKET NO. RE-00000C-94-0165 **REBUTTAL TESTIMONY OF DANIEL WM. FESSLER**

On Behalf of

TUCSON ELECTRIC POWER COMPANY

FEBRUARY 4, 1998

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INTRODUCTION AND PURPOSE

Q1. Please state your name, affiliation and business address.

A. My name is Daniel Wm. Fessler. I am a partner in the law firm of LeBoeuf, Lamb, Greene & MacRae. My address is One Embarcadero Center, San Francisco, California.

Q2. On whose behalf are you appearing in this proceeding?

A. Tucson Electric Power Company.

Q3. Have you filed other testimony in this proceeding?

A. Yes, I filed direct testimony.

Q4. Have you had an opportunity to review the prefiled testimony of the various parties to this Rulemaking?

A. Yes, I have reviewed the direct testimony of 26 witnesses representing a wide variety of interests. As a former regulator who has heard and weighed social, political, legislative and legal arguments in an effort to frame and defend the public interest, I was disappointed in some of the myopic and revisionist positions taken by various witnesses. In my direct testimony, and again today, I rely upon these broad ranging disciplines to form my conclusions and recommendations regarding matters at issue in this proceeding.

Q5. Have you formed any opinion on whether the positions taken by these various stakeholders exhibit the degree of consensus which you and your colleagues found necessary to advance the introduction of competition in California?

A. Unfortunately, they do not. Indeed, the range of opinion on such vital issues as whether there is a regulatory compact which must be respected and, if so, the consequences of such a compact is wider in scope and more vociferous in tone than anything I can remember in the nearly four years in which these issues were debated in California. I find this particularly troubling because we are now less than 11 months from the point at which the Commission Rules call for the introduction of competition. Unless these hearings are able to move the various stakeholders to a constructive resolution of these issues, I fear for the timely introduction of competition in Arizona.

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Q6. You have expressed "fear for the timely introduction of competition in Arizona," but isn't it the case that the Commission can decree such a result notwithstanding the degree of disagreement among the stakeholders?

A. My reading of Dr. Rose's testimony suggests that this may be his position. In my view, any attempt to force so fundamental a change on such unwilling parties would be unsound in its assessment of the Commission's constitutional authority and utterly implausible in terms of pragmatic consequences. Consistent with the view that I articulated at the beginning of the California restructuring, I continue to maintain that the replacement of vertically integrated monopolies with a disaggregated industry dependent on the discipline of competition in the field of generation cannot be accomplished in the absence of a strong consensus. I respectfully suggest that in Arizona, as in California, the Commission's worthy goals lie beyond the reach of decrees and orders. If they are to be attained and sustained the Commission must be able to produce widespread participation and cooperation on the part of the present and new market entrants. The alternative is as ugly as it is predictable. Any final order of the Commission given in the face of substantial opposition will inevitably result in judicial appeals that frustrate rather than fulfill the ambitions which the Commission has framed for the People of Arizona.

Q7. For the purposes of this rebuttal testimony, how do you propose to focus your efforts and order your suggestions to the Commission?

A. I am going to concentrate on the related issues of whether restructuring must take into account the existence of a "regulatory compact" or "contract" and, since I will contend that it must, the implications of that compact on the terms of the Commission's final restructuring policies and implementation strategies. I will focus my rebuttal submission on the testimony of Dr. Kenneth Rose for the Arizona Corporation Commission Staff, Dr. Eugene P. Coyle for the City of Tucson, Dr. Richard Rosen for the Residential Utility Consumer Office, and Mr. Kevin C. Higgins for Arizonans for Electric Choice, et al. Drs. Rose and Coyle have filed testimony which asserts that there is no regulatory contract or compact and concludes that recognition of stranded costs and provision for a recovery opportunity for the Affected Utilities is a matter of grace wholly within the Commission's discretion. Dr. Rose, Dr. Coyle, Dr. Rosen and Mr. Higgins offer the view that, if stranded costs are recognized, the

Affected Utilities not be accorded an opportunity to recover 100% of the funds invested in generation units built and deployed in the service of ratepayers under an era of de jure monopolies. I respectfully disagree with each of these contentions. I will conclude with the views of Dr. Coyle and Dr. Rose on the advisability of securitization as a feature of any final Rules.

THE REGULATORY COMPACT

Q8. Could we begin with your reaction to the contentions that the regulatory contract or compact is a recent, self-serving invention of the utilities?

A. Yes, for this issue lies at the heart of the reform effort insofar as the Affected Utilities are concerned. It is clear that Dr. Coyle is a believer in the recent invention theory notwithstanding his candid recognition that: "[i]t is fundamental to the whole issue of Stranded Costs to note that there is a valid debate over the legal right of the Affected Utilities to recovery of full stranded costs."[1] I also find rhetoric in Dr. Rose's testimony which partakes of the same denial. However, upon closer reading I am not convinced that Dr. Rose is urging that the Commission risk the fate of the restructuring on such a gambit.

Q9. In his filed testimony, Dr. Coyle informs the Commission that, to his knowledge, "the phrase a 'regulatory compact' did not appear in printed books and articles until deregulation and the issue of stranded cost became important to utilities. [Dr. Coyle's] conclusion is that the notion of a 'regulatory compact' is a recent invention which is used to, but does not, justify 'stranded cost.'"[2] Do these sentiments accord with your own knowledge?

A. No, I find printed references to the "regulatory compact" a decade before the subject of restructuring the electric services industry gained currency. The term is used by Judge (now Associate Justice) Scalia in *New England Coalition on Nuclear Pollution v. Nuclear Regulatory Comm'n.* 727 Fed.2d 1127, 1130 (D.C. Cir. 1984) where he characterizes a ". . .compact whereby the utility surrenders its freedom to charge what the market will bear in

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1 Dr. Coyle at p. 5, lines 11-13.
2 Dr. Coyle at p. 13, lines 4-8.

exchange for the state's assurance of adequate profits. . . ." In the same year the phrase was used by the Washington Utilities and Transportation Commission:

> Understanding the dichotomy between the treatment of expenses prudently undertaken to provide service and providing return on investment and that they are two separate matters is critical to the understanding of the regulatory compact and the operation of the utilities.

Washington Utils. & Transportation Comm'n. v. Puget Sound Power & Light Co., 62 PUR4th 557, 581.

Q10. Does the term "regulatory contract" have a history of use prior to the debate over stranded costs?

A. Yes, the term has been in use for nearly 120 years. Indeed, it is more widespread than references to the "compact" because the term "contract" has a much more defined meaning in the political and legal history of the United States. Those who charge that the "regulatory contract" is a recent invention of the utilities - deployed as a self-serving prop for the asserted right to a reasonable opportunity to recover their stranded costs and be held harmless against stranded liabilities - make these claims in the face of fact. I do not doubt their good will, but I can prove that they are guilty of gross error. This proof requires that I ask the Commission to take notice of judicial decisions which have established, upheld and clarified the existence of the regulatory compact or contract. These cases are matters of public record, and are brought to the Commission's attention to conclusively show that: (a) the terms have, in fact, been used for decades; (b) had Dr. Coyle checked the public record and available literature he would have known that neither term is a "recent invention"; and (c) the judicial understanding of the regulatory contract is one of enforceable limitations on the discretion of government rather that the social arrangement claimed by some witnesses.

One hundred and thirteen years ago the United States Supreme Court issued a short, unanimous and definitive decision on the implications of a utility franchise granted by a state or one of its instrumentalities. The plaintiff had obtained a franchise granting it the exclusive right to supply the citizens of New Orleans with water for domestic consumption for a period of 50 years. Prior to the expiration of this time period the state amended its constitution to prohibit monopolies, and the city government sought to authorize a competitor. The utility

commenced suit in the United States District Court seeking an equitable decree prohibiting the new entrant from laying pipes or otherwise seeking to serve customers within what it claimed to be the territory of its exclusive franchise. The trial court ruled in favor of the defendant recognizing the authority of the state to change its mind and the city to grant competitive entry. On appeal the Supreme Court unanimously reversed this decision.

> . . . The right to dig up and use the streets and alleys of New Orleans for the purpose of placing pipes and mains to supply the city and its inhabitants with water is a franchise belonging to the State, which she could grant to such persons or corporations, and upon such terms, as she deemed best for the public interest. . . . Such was the nature of the plaintiff's grant which, not being at the time prohibited by the constitution of the State, was a contract, the obligations of which cannot be impaired by subsequent legislation, or by a change in her organic law. It is as much a contract, within the meaning of the Constitution of the United States, as a grant to a private corporation for valuable consideration, or in consideration of the public services to be rendered by it, of the exclusive right to construct and maintain a railroad within certain lines and between given points, or a bridge over a navigable stream within a prescribed distance above and below a designated point.

New Orleans Water-Works Co. v. Rivers, 115 U.S. 674, 681 (1885).[3]

Precisely 100 years ago, the same debate shifted to the west and produced exactly the same reaction from the Court. In *Walla Walla City v. Walla Walla Water Co.*, 172 U.S. 1 (1898), the city had granted a 25 year franchise to the water utility under terms of which it was to build infrastructure and furnish water for domestic consumption and fire fighting purposes. An express term of the grant provided that the city would not construct or

[3] The Court dismissed as "idle" fears that the grant of such a franchise was prejudicial to public health or safety holding that the state police power was always sufficient to protect those interests against private property uses and claims. The object sought by the altered constitution and city council resolution was a new economic arrangement not a safety or health concern. Such a step was beyond the legislative authority of the State of Louisiana or its political subdivisions.

purchase its own water works unless it had first obtained a judgment from a court of competent jurisdiction that the utility was in breach of its service obligations. Before the expiration of this term, and without initiating litigation to secure a judgment that the utility was in default as to any service obligation, the city sought to issue bonds to finance a municipal water works. The utility commenced suit in federal court to enjoin the city and its officers, claiming that the municipal water works scheme would impair the obligation of a contract in violation of Article I, Section 10, Clause 1 of the United States Constitution. The trial court granted the injunction and, on appeal, the United States Supreme Court affirmed. In the course of a unanimous opinion the Court declared:

> . . . this court has too often decided for the rule to now be questioned, that the grant of a right to supply gas or water to a municipality and its inhabitants through pipes and mains laid in the streets, upon condition of the performance of its service by the grantee, is the grant of a franchise vested in the State, in consideration of the performance of a public service, and after performance by the grantee, is a contract protected by the Constitution of the United States against state legislation to impair it.

172 U.S. at 9.

Q11. Has the regulatory contract been expressly recognized and defined by the Supreme Court of Arizona?

A. Yes. In a widely reported and often cited case, *Trico Electric Cooperative, Inc.*, 92 Ariz. 373, 377 P.2d 309 (1962), the Supreme Court recognized and defended the regulatory contract. The dispute was over service territories with Trico claiming that it had achieved the status of a public service corporation with a territory which included the area being claimed by Tucson. The immediate goal of the litigation was Trico's attempt to secure a writ of mandamus compelling the Commissioners to approve a contract which Trico had formed with a real estate developer who was building a project in a previously uninhabited portion of Trico's service territory. Finding no evidence that the Commission had conducted a Section 40-252 proceeding to rescind, alter or amend Trico's certificate of convenience and necessity, the trial court granted the writ. On appeal, the Supreme Court unanimously affirmed and, in

the course of its opinion, removed several issues from contention insofar as the decisional, statutory and constitutional law of Arizona is concerned:

> In the performance of its duties with respect to public service corporations the Commission acts as an agency of the State. By the issuance of a certificate of convenience and necessity to a public service corporation the State in effect contracts that if the certificate holder will make adequate investment and render competent and adequate service, he may have the privilege of a monopoly as against any other private utility. Trico's right to maintain its distribution lines in the area of its certificate, and to make extensions therefrom to customers resulting from the development of the area served by it, is a vested property right, protected by Article 2, Section 17, of the Arizona Constitution.

Q12. The position of the Commission Staff, as presented in the testimony of Dr. Rose, asserts that "[t]he term regulatory compact, properly understood, does not refer to an implied, implicit, or explicit contract. Properly understood, the term regulatory compact is a metaphor that refers to the nature of regulation of a regulated monopoly."[4] Do you agree with this statement?

A. We are faced with two assertions. In my view the first is demonstrably wrong while the second may provide a key to some common ground.

The Staff view that a proper understanding will lead to the conclusion that there is no "implied, implicit, or explicit contract" is one I do not share. More importantly, if my understanding is "improper" I take comfort that it mirrors the view of the Supreme Court of Arizona. Any infrastructure investment made by a public service corporation in this state since 1962 has been in the context of the Court's express recognition of a contract with the State undertaken on behalf of the public. *Trico Electric Cooperative, Inc.*, 92 Ariz. 373, 377 P.2d 309 (1962).

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[4] Dr. Rose at p. 2, lines 4-6.

The second assertion, that we are dealing with a "metaphor that refers to the nature of regulation of a regulated monopoly," is one that I can accept if we then go on to a factual and complete revelation of the key terms "nature of regulation of a regulated monopoly." *Trico Electric* is a good starting point because the Court did not mince words. Public service corporations formed a contract with the State of Arizona which acted through the agency of this Commission. As certificate holders the utilities were bound to "make adequate investment and render competent and adequate service." So long as the utility keeps faith with those service obligations, the State is obliged to protect and defend a monopoly service territory. The *Trico* court was equally blunt as to the circumstances in which the vested property right to an exclusive service territory could be altered:

> Quite aside from statutory requirements the rescission or revocation of all or a portion of a certificate of public convenience and necessity requires strict compliance with the procedural prerequisites of notice and hearing. The Commission's power to grant, amend, or cancel certificates of convenience and necessity is limited to that expressly granted by the Constitution and laws of Arizona.

92 Ariz. 373, 381, 377 P.2d 309, 315.

I respect the fact that Dr. Rose has made his response as a "non-attorney," but the existence of judicial decisions is a fact, and their content part of the public law of Arizona open for the inspection of all and obligatory on all as citizens irrespective of the manner in which we make a livelihood. My recommendation to the Commission is that it move the debate beyond the semantics of "compact" vs. "contract" and simply face up to the regulatory consequences of an honorable history of "regulated monopolies." The occasion for our current discussion is the Commission's desire to break from that history and seek the public advantage in new arrangements. Dr. Rose tells us that: "We must be clear that the social compact is not now, nor has it ever been a contract guaranteeing the utility a perpetual monopoly, freedom from competition or full cost recovery."[5] Tucson Electric Power has

[5] Dr. Rose at p. 3-4, lines 27-28 and 1.

never contended for any of these exaggerated claims. To first set them up and then attack them is to divert attention from the business at hand.

Q13. Is it your testimony that because the outstanding certificates of convenience and necessity of the Affected Utilities enjoy recognition as contracts under decisions of the Supreme Court of the United States and the Supreme Court of Arizona, Commission sponsored efforts to introduce competition must be abandoned?

A. No, that is not my position nor is it the position of Tucson Electric Power. The utility has made it quite plain that it is prepared to cooperate in a fundamental amendment to its certificate of convenience and necessity and to forego the monopoly privilege *if* the revised regulatory regime and rules for the introduction of competition provide a reasonable opportunity to recover its stranded costs, stranded liabilities, and regulatory assets. Provided that the final Rules and Commission implementation strategies accord this opportunity, I believe that they stand an excellent chance of surviving scrutiny under *United States Trust Co. v. New Jersey*, 431 U.S. 1 (1997), the Court's most recent decision balancing the rights of investors against the ongoing desire to pursue public health, safety, and evolved notions of economic advantage. Even more important, given the Commission's announced implementation target, the inclusion of the reasonable opportunity will ensure that these issues will *not* be litigated by entities able to assert impairment of contract claims in federal court and takings claims in state courts.

Q14. If you regard compliance with *United States Trust v. New Jersey* as the key to harmonizing the State's desire to move away from integrated monopolies and toward competition in generation, can you explain the precise linkage to your conclusion that the Rules and implementation strategies must provide the Affected Utilities with a reasonable opportunity to recover their stranded costs, stranded liabilities and regulated assets?

A. Yes, but to do so I will have to provide a brief factual background on the dispute before the Supreme Court. In 1962 the States of New Jersey and New York entered into a contract with each other and the bondholders of the Port Authority in which the states agreed not to use the revenues and reserves of the Port Authority to subsidize mass transit. In 1974, in the wake of the OPEC embargo, the states opted for aggressive plans to solve urban transit problems as

well as excessive individual dependence on automobiles. A critical step in pursuit of these goals was passage of parallel statutes repealing the prior limitation on the use of Port Authority funds to subsidize mass transit. The Port Authority commenced suit claiming impairment of contract. New Jersey state courts rejected the suit and, on appeal, a divided Supreme Court reversed, holding the 1974 legislation in both states null and void as an impairment of contract.

Writing for the majority, Justice Blackmun declared that for nearly a century the impairment of contract clause had been read literally as an explicit Constitutional limitation on state power. However, beginning in the 1930s the Court moved away from what he termed a mechanistic approach toward a balancing test which sought to harmonize security for investors and other contract parties with the ongoing need of state governments to advance the health and safety of citizens. Indeed, the scope of legitimate state interests had grown to include economic concerns. It was precisely on this point that the states sought to defend their repeal. The Court responded:

> Mass transportation, energy conservation, and environmental protection are goals that are important and of legitimate public concern. Appellees contend that these goals are so important that any harm to bondholders from repeal of the 1962 covenant is greatly outweighed by the public benefit. We do not accept this invitation to engage in a utilitarian comparison of public benefit and private loss. . . [A] State cannot refuse to meet its legitimate financial obligations simply because it would prefer to spend the money to promote the public good rather than the private welfare of its creditors. We can only sustain the repeal of the 1962 covenant if that impairment was both reasonable and necessary to serve the admittedly important purposes claimed by the State.
>
> . . . But a State is not completely free to consider impairing the obligations of its own contracts on a part with other policy alternatives. Similarity, a *State is not free to impose a drastic impairment when an*

> *evident and more moderate course would serve its purposes equally well.*

431 U.S. at 29, 30 (emphasis added).

The missing ingredient which could have saved the otherwise Constitutionally doomed New Jersey and New York legislation had been alluded to earlier in the majority opinion:

> . . . As a security provision, the covenant was not superfluous; it limited the Port Authority's deficits and thus protected the general reserve fund from depletion. *Nor was the covenant merely modified or replaced by an arguably comparable security provision.* Its outright repeal totally eliminated an important security provision and thus impaired the obligation of the States' contract.

431 U.S. at 19 (emphasis added).

The implication for the Commission's competition strategy is clear: repeal of the opportunity to recoup investments in generation plants admitted to ratebase, pass through costs of power and fuel purchase contracts, and recover regulatory assets under traditional cost of service ratemaking is not an impairment if it is accompanied by a comparable security provision to protect the interests of utility shareholders. The opportunity to recover 100% of stranded costs, stranded liabilities and regulatory assets is that reasonably comparable security provision.

Q.15. But the Staff position, as articulated by Dr. Rose, is that "states are free, at their discretion, to provide compensation for uneconomic assets as some states have done. But it is not a constitutional requirement as is often claimed."[6] This conclusion is drawn from a number of explicit premises the most important of which is the contention by Dr. Rose that ". . . the current regulatory process developed over the last several decades was intended to act as a surrogate for competition, albeit an imperfect

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6 Dr. Rose at p. 3, lines 13-15.

one, since competition was itself viewed as impractical."[7] This contention is married to an earlier assertion that a move to a competitive market is simply a superior ". . . means to determine the fair value of utility assets and control costs. . . ."[8] Finally, Dr. Rose reviews the tools of what he describes as "the current regulatory process" and concludes that they were an imperfect substitute for competition having failed to provide regulators with ". . . all the necessary information needed to determine the price for a utility's services equivalent to a competitive market."[9] What is your response?

A. I obviously disagree with the conclusion that the recognition of the "stranded costs" defined in the Commission's Rules is wholly discretionary. I have provided my reasons for concluding that the classical regulatory contract limits the discretion of this Commission under both the federal and state constitutions and that to ignore these limitations is to doom the reform efforts to well-grounded legal challenges.

It is evident that our differing conclusions stem from differing premises. Dr. Rose has not had an opportunity to study and comment on the cases which I have reported to the Commission. I have had the opportunity to think on the premises which are advanced in support of the Staff's position. I respectfully suggest that they are a half truth pointing down a blind alley. There is truth in the assertion that classical cost of service regulation was intended to function as a substitute discipline for competition. I also share the Staff's belief that competitive market mechanisms will prove a superior discipline and that this is the long-term public advantage being sought in restructuring the industry and regulation. But to reduce the entirety of current regulation to an inherently flawed attempt to mimic market forces in determining a "price for a utility's service" is neither fair nor factual. It simply ignores the key features of cost of service regulation which governed utility investment in infrastructure.

There is no mention of the fact that the utility acted under Commission and statutory imposed restraints that placed utility shareholders at substantial risk by limiting recovery to

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7 Dr. Rose at p. 3, lines 16-18.
8 Dr. Rose at p. 3, lines 9-10.
9 Dr. Rose at p. 3-4, lines 23 and 1.

only prudently incurred costs. Further, the opportunity to recover prudently incurred cost was stretched out over a long amortization period fixed by the Commission for the convenience of ratepayers. During this protracted period the utility was forbidden to realize any more than a Commission set return on this investment. Add to this that all other aspects of the utility's service were remunerated at Commission determined rates rather than market forces and you have the elements of the picture which placed utility investors under constraints that no unregulated counterparts faced. But there was symmetry to the classical contract. So long as their investment vehicle retained its certificate of convenience and necessity, utility investors could rely upon the resources of the service territory and rates that were designed to provide an opportunity to recoup the reasonable expenses, recover prudently incurred costs, and earn a return on that investment. This Rulemaking openly contemplates repeal of the exclusive service territory and projects a future return on generation investments and contract obligations that is set by markets. For investments and contracts formed under this replacement set of institutions, I have no difficulty in seeing the owners of market participants held to the risks and rewards of their venture. But we are discussing prior investments and prior obligations and I repeat my view that the Commission is obligated to keep faith with the contract it formed as the duly authorized agent of the People of Arizona.

Q.16. Dr. Rose, the Staff witness, and Mr. Kevin Higgins, on behalf of Arizonans for Electric Choice and Competition et al., advance the theory that if there is an obligation to provide an opportunity for the Affected Utilities to recover their stranded costs, customers cannot be held liable because they did not cause the condition nor were they obligated to continue as ratepayers to any given utility. Please comment on these contentions.

A. The Staff asserts that, if there was a duty to serve on the part of the utility, there "never was nor is there now a concurrent obligation to buy on the part of customers of the utility."[10] In support of this proposition, Dr. Rose points out that if there was such a direct obligation the utilities could have pursued individual customers who left the service territory or switched to

[10] Dr. Rose at p. 4, line 7-8.

self-generation. Again, there is an element of truth in this observation, but the net effect is misleading. If we limit ourselves to the past and current regulatory model, it is true that utilities did not pursue claims against departing customers. But it is equally true that the Commission fixed rates designed to allow the utility to recoup its expenses, invested capital, and return on equity from all remaining ratepayers. Once infrastructure costs had survived a prudency review and been placed in the utility ratebase, it cannot be denied that rates were designed to allow recovery and imposed on end users of electricity as the source of those funds. The linkage to ratepayers was not hypothetical; it was very direct. While it is true that a ratepayer was free to move out of the service territory, it is equally true that no ratepayer could remain within the confines of a service territory and take electric service other than from the certificated public service corporation. Again, this point was withdrawn from controversy in Arizona with the Supreme Court's decision in *Trico:*

> It would inevitably follow, from our determination, that Trico was a public service corporation, that it is subject to all the burdens and entitled to all the benefits which apply to public service corporations generally. The term 'public service corporation' implied service to the public.
>
> . . . .
>
> We hold that the Corporation Commission was under a duty to Trico to protect it in the exclusive right to serve electricity in the region where it rendered service, under its certificate. The Commission was under duty to prohibit a private utility under its jurisdiction from competing in that area, unless, after notice and an opportunity to be heard, it shall have been made to appear that Trico failed or refused to render satisfactory and adequate service therein, at reasonable prices.

92 Ariz. at 385, 387, 377 P.2d at 318, 319.

In summary the classical regulatory order existed for the benefit of the public and will be replaced by a new alignment of providers and customers which represents the efforts of the Commission to serve the public.

Mr. Higgins argues for a sharing of the financial burdens associated with stranded cost recovery. I will address his notion of a 50/50 split in a moment, but first I would like to

spend time with his contention that it will be "competitive suppliers" and not "customers" who will occasion stranded costs on the part of the Affected Utilities.[11] The proposition confuses the instrument of change with the cause of change. This is puzzling given Mr. Higgins' clear understanding that "'[s]tranded cost' is a term used to refer to that portion of a utility's regulator-approved, generation-related fixed costs and regulatory assets which the utility does not recover due to the introduction of a competitive generation market and the resultant lower electricity prices."[12] On the face of this definition is recognition that stranded costs are occasioned by a change in regulatory policy which, as I have noted, is being pursued for the presumed advantage of all Arizona ratepayers.

Q17. Mr. Higgins[13] and Dr. Rosen[14] suggest a 50/50 sharing of any stranded cost liability between ratepayers and the shareholders of Affected Utilities. In your opinion, would such a provision meet the minimal test for a comparable security provision to protect the interests of utility shareholders?

A. No, such a provision would fail the comparability test by design. Again, we must begin by reconciling ourselves to the existing regulatory policies and practices under which these infrastructure investments and contract liabilities were incurred. As was clearly recognized in the definition offered by Mr. Higgins, these investments and obligations already exist and are currently the liability of Arizona ratepayers under cost of service ratemaking. This liability is not for some arbitrary fraction but for rates designed to provide a fair opportunity for the utility to recover all of its costs, recoup all of its investment and earn a return on equity. To abolish this opportunity and replace it with one designed to permit a fractional accomplishment of these critical objectives is, by definition, to impair the contract recognized in *Trico* under terms designed to be nullified under the test enunciated in *United States Trust v. New Jersey.*

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11 Mr. Higgins at p. 10, lines 4-5.
12 Mr. Higgins at p. 5, lines 7-10.
13 Mr. Higgins at p. 11, lines 14-16.
14 Dr. Rosen at p. 69, lines 15-18.

SECURITIZATION

Q18. Dr. Rose has testified that the Staff does not believe that securitization of uneconomic costs is in the best long-term interest of Arizona customers. Specifically, he contends that providing such an option would hinder the development of a competitive market and transfer significant risk from the Affected Utilities to customers. What is your view of these charges?

A. My position is much closer to that of Dr. Coyle who testified on behalf of the City of Tucson. Dr. Coyle captured the essence of the idea when he noted that the choice is akin to dealing with stranded costs using a 30 as opposed to a 15 year mortgage.[15] The short answer is that securitization is neither inherently "good" nor "bad" but a tool the appropriate use of which is dependent on a variety of factors. If the borrowing costs of the utilities are relatively high, securitization may well produce real savings for ratepayers owing to an enhanced credit rating which translates into lower interest rates. This has been the experience in California and there is no reason to think that this Commission will be less artful in designing a securitization plan.

Assuming that financial market conditions continue to be favorably disposed so that securitization can be shown to lower the carrying costs of paying transition costs over time, I believe that each of the "bad" features identified by Dr. Rose can be avoided or shown to be fanciful. The Staff assertion that securitization "represents a significant transfer of risk from the utility to customers" appears to come down to two fears. The first is that the bonds would have to be honored.[16] To my mind the notion of a risk shift in these circumstances is fanciful. I have contended that the Commission is obligated to provide the Affected Utilities with a reasonably comparable opportunity to recover their affected infrastructure investments, pass through any over-market costs associated with previously formed power or fuel purchase contracts, and realize regulatory assets. Any plan that would pass the comparability test could not be written in disappearing ink featuring bogus or easily evaded payment obligations. The second claimed risk is one of over-collection.[17] I agree with Dr.

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15 Dr. Coyle at p. 31, lines 18-32.
16 Dr. Rose at p. 25, lines 17-19.
17 Dr. Rose at p. 25, lines 21-26.

Rose that estimates may turn out to be in error and have testified to that fact. But the remedy is equally clear in my mind: design a securitization plan that issues the bonds in series with an opportunity to decrease or increase subsequent issues in accordance with emerging data. Another alternative is to provide for a reserve so that a portion of the proceeds would be held in an account which would be credited to ratepayers in the event of over collection.

Aside from the notions of risk shifting, the Staff testimony asserts that "securitization results in a large infusion of cash into the utility. . . . This money can be used in any manner that holding company desires, including using it to restrict competition."[18] We are not told just how that thwarting of competition might be effected, but I suspect that Dr. Rose has in mind some form of predatory pricing on the part of the cash infused utility. I have two responses. First, predatory pricing is illegal and the appropriate societal response is to deal with the offense if it takes place rather than preventing an entity from acquiring assets for which there would be many productive and perfectly lawful uses. Second, in a market for generation which features free entry and exit, predatory pricing would be nonsensical. Any entity selling below cost into such a market will quickly discover that, while its competitor may be forced out of business, the plant and equipment will not cease to exist but merely be transferred to a subsequent rival with a dramatically enhanced competitive position.

When one confronts the suggested evils of securitization and finds them either non-substantive or easily avoided, the Commission is left with an ability to pursue a plan which will capture the benefits of lower financing costs while achieving another important goal mentioned by Dr. Coyle. Securitization would enable the Commission to quickly and decisively deal with past obligations while at the same time achieving generational equity by spreading the burden over future users.

Q.19. Does this complete your rebuttal testimony?

A. Yes

[18] Dr. Rose at p. 25, line 27 and p. 26, lines 2-3

BEFORE THE ARIZONA CORPORATION COMMISSION

JIM IRVIN
Commissioner – Chairman
RENZ D. JENNINGS
Commissioner
CARL J. KUNASEK
Commissioner

IN THE MATTER OF THE COMPETITION IN THE PROVISION OF ELECTRIC SERVICES THROUGHOUT THE STATE OF ARIZONA.	) DOCKET NO. RE-00000C-94-0165)) **REBUTTAL TESTIMONY OF**) **KENNETH GORDON**

On Behalf of
TUCSON ELECTRIC POWER COMPANY

FEBRUARY 4, 1998

n/e/r/a
Consulting Economists

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REBUTTAL TESTIMONY OF KENNETH GORDON

I. QUALIFICATIONS

Q. PLEASE STATE YOUR NAME AND ADDRESS.

A. My name is Kenneth Gordon. I am Senior Vice President of National Economic Research Associates, Inc. (NERA), an economic consulting firm specializing in microeconomic analysis, including regulated industries. My business address is One Main Street, Cambridge, MA 02142.

Q. ARE YOU THE SAME KENNETH GORDON WHO FILED DIRECT TESTIMONY IN THIS PROCEEDING ON JANUARY 9, 1998?

A. Yes, I am.

II. PURPOSE OF TESTIMONY

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. The purpose of my rebuttal testimony is to respond - on behalf of Tucson Electric Power Company (TEP or Company) - to certain arguments and assertions made in testimony that was filed on January 21, 1998 by a number of parties representing a diverse group of interests.

III. THE REGULATORY COMPACT

Q. MANY WITNESSES OBJECT TO THE CHARACTERIZATION OF A REGULATORY COMPACT PUT FORTH BY TEP WITNESSES. WHAT IS YOUR UNDERSTANDING OF THE REGULATORY COMPACT?

A. In the context of regulated utility companies, the term "regulatory compact" is a shorthand way of referring to the understanding between regulators and investors inherent in traditional, rate-base, cost-of-service regulation. The essence of that understanding is that regulators ensure an opportunity to recover all prudently incurred costs, in exchange for the

utility assuming an obligation to serve all customers who want service, at rates that cover the cost of capital but do not allow the firm to earn economic profits. It does not matter whether one wants to call this understanding a compact, a bargain, or a banana[1] - as long as one understands that neither the regulators nor the utilities can unilaterally change the terms of the bargain *as they relate to past events*. Regulators and policymakers are now and always have been free to alter the terms of this understanding on a going-forward basis - and I am a long-time advocate of doing so through the adoption of performance-based regulation, and, even more importantly, through the introduction of competition - but it is inappropriate to ignore the past or apply the substantive standards of the new, competitive model to previous arrangements that were consummated under the soon-to-be discarded standards of rate-base regulation.

Q. BUT DR. ROSE SAID THAT REGULATORS ALWAYS HAVE BEEN FREE TO CHANGE THEIR METHOD OF ASSET VALUATION TO A MARKET VALUATION (ROSE TESTIMONY, P. 7, LINES 5-8).

A. That is correct, but it does not absolve the regulator from a responsibility to deal fairly with the consequences of that change and how it impacts commitments that were made under the old system. Setting rates on the basis of historic costs may have been a consumer safeguard in the quest to mimic the outcome of competitive markets, as Dr. Rose suggests, but if there is evidence that regulators have failed in that regard, they cannot simply wash their hands of past mistakes and start fresh with a new system.

Dr. Rose correctly identifies what the outcome of such a change in the current environment would be if past commitments are not honored: it would benefit ratepayers (though only in the short-term, in my opinion) and penalize stockholders (Rose Testimony, p. 7, lines 1-3). However, he suggests that this outcome is fair as long as regulators do not change "back and forth" (Id.). In other words, he's saying that it is fair to penalize

[1] "If, for whatever reason of politics, law, or aesthetics, one objects to the characterizing the implicit basis of these intensely contested [rate case] determinations as compacts or bargains, then, by good fortune, we have a (continued...)

stockholders once ... as long as you don't do it again. I submit that making a regulatory policy change without compensation for the consequences of that change is the very essence of government opportunism. I agree with Dr. Rose that the intent of electric restructuring is to improve the incentives to minimize costs (Id., lines 3-5), but this change only takes effect on a going-forward basis and cannot be used as a mechanism for changing the nature of past commitments or expressing a wish that different decisions had been made in the past. Only in the future can the benefits of competition be realized.

Changing the rules of the game and then applying them to what happened in the past would be like doing away with the 3-point shot in basketball and then adjusting all of the scores and outcomes of last year's games by subtracting a point for every shot that counted for three points under last year's rules. Rules and standards can be changed at a point in time, but they cannot be applied to the past. This policy requirement is similar in principle to the prohibition against the government passing laws that prohibit something and then prosecuting you for doing it before the law was passed.

Q. YOU SAID THAT UTILITY INVESTORS ARE GUARANTEED TO AN OPPORTUNITY TO EARN A COMPETITIVE RETURN. IS THIS THE SAME AS GIVING UTILITIES A GUARANTEE OF STRANDED COST RECOVERY?

A. Not at all. My testimony is that utility investors should be guaranteed a reasonable opportunity to recover 100% of their stranded costs - not that they should be guaranteed recovery of 100% of stranded costs. "Reasonable" not only means that the utility will have to expend solid management effort in order to achieve its goal, but also that the standard does not represent an impossible hurdle. This is the same judgment that regulators have had to bring to bear since the beginning of regulation. Several witnesses mischaracterize TEP's testimony in this respect. Utilities have never had a guarantee that they will recover all of their costs, even those costs that the regulator expressly approves for recovery in rates. The

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(...continued)

historical precedent for an alternative appellation – let us call it a banana." Alfred E. Kahn, "Thirteen Steps to Reconciliation," *Regulation*, 1996 Number 4, p. 14.

opportunity to recover those costs has been subject to rate case evaluations of company productivity, filing requirements, and changes in supply and demand conditions and technology that occur independent of government actions. This should not change with the introduction of competition.

Q. WHAT DO YOU MEAN BY "CHANGES IN SUPPLY AND DEMAND CONDITIONS AND TECHNOLOGY THAT OCCUR INDEPENDENT OF GOVERNMENT ACTIONS"?

A. This is an important distinction. Several witnesses have suggested that allowing an opportunity for stranded cost recovery is extraordinary because utilities were always at some degree of risk from changes in supply and demand conditions and technology. That is true so far as it goes, but it does not address the central question related to stranded costs and customer choice - that is, whether utility investors were at risk from changes in supply and demand conditions and technology that would have had no effect on cost recovery *absent government actions*. It is undeniable that the introduction of competition, which, as several witnesses point out is what actually strands costs, occurs only as a result of fundamental, and until very recently, unanticipated, shifts in government policy toward the electricity industry.

In addition, it is well worth noting that policymakers in other industries have either provided for stranded cost recovery or are planning to open investigations to explore the issue - further evidence that such recovery is not "extraordinary." For example, consider the dramatic success achieved by the FERC in restructuring the gas industry through orders such as 436 and 636. It is generally recognized that this success was made possible largely because the FERC decided - after five years of struggling in legal and regulatory proceedings with the issue of stranded costs - to allow pipelines the opportunity to recover 100% of their stranded costs. In addition, as I noted in my direct testimony, the FERC has recognized the legitimacy of electric utility stranded cost claims, at least as they apply to

wholesale markets.[2] As Professor Richard J. Pierce, Jr. has observed, before a workable solution to the stranded cost problem was achieved "the reluctance of regulatees to absorb transition costs, combined with the sympathetic response of judges to the plight of FERC's regulatees, posed a major threat to the viability of any FERC attempt to implement a major change in policy."[3]

In the telephone industry, the Federal Communications Commission has stated in its recent Access Charge Reform order its intention to issue a separate order that

> will....address 'historical cost' recovery: whether and to what extent carriers should receive compensation for the recovery of the allocated costs of past investments if competitive market conditions prevent them from recovering such costs in their charges for interstate access services. (Access Charge Reform First Report and Order, par. 14).

Q. SEVERAL WITNESSES POINT OUT THAT STRANDED COST RECOVERY IS NOT CONSISTENT WITH THE COMPETITIVE MODEL. DO YOU AGREE?

A. Yes, but regulation generally has not been applied in a manner consistent with the economic principles of a competitive market model. For example, as I noted in my direct testimony, shareholders bear all of the risk and recoup all of the rewards associated with their investments in unregulated competitive markets. That is clearly not the case under traditional forms of regulation, and it is one of the benefits of moving to competition and/or incentive regulation that such a policy change *prospectively* will alter - hopefully, once and for all - the risk/reward relationship to make it closer to the competitive model. Also, competitive market prices are determined according to incremental or reproduction costs, and, while regulators have always had the option of setting rates based on reproduction costs, they have generally used historic costs as reported in a test year at least in part as the basis for rate-setting. In this respect, I do not see how Dr. Cooper can contend that utilities

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[2] Direct Testimony of Kenneth Gordon, p. 9, lines 14-23, citing to: *Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities and Recovery of Stranded Costs by Public Utilities and Transmitting Utilities*, Federal Energy Regulatory Commission, Docket Nos. RM95-8-000 and RM94-7-001, Order No. 888 Final Rule, issued April 24, 1996.

[3] "The State of the Transition to Competitive Markets in Natural Gas and Electricity," April 1994, page 4.

"never should have anticipated earning more than a fair return on their efficient forward-looking costs" (Cooper Testimony, p. 13, lines 14-15). What he is saying in effect is that the reasonableness of utility rates should be judged by regulators according to how they compare with reproduction costs, even though those same regulators established the same rates at least in part according to historic costs. The point is that while conceptually more than one approach to valuation can be used, each must be applied in an internally consistent manner.

While it is appropriate to adopt competitive markets as the proper policy goal wherever competition is feasible, it is not appropriate to judge utility claims that flow from commitments made under the regulatory model according to how those claims compare to what utilities should expect under the competitive model. I agree with all of the efficiency benefits described by other witnesses as the benefits of competition, and that is why I pursued a competitive market agenda as a regulator – for the telecommunications industry, as well as electric and gas. Competition in electric generation will deliver significant benefits to customers over the long-run, even while customers pay for recovery of the utilities' stranded costs. The forward-looking costs of generation under competition will be lower than they would have been under regulation, and properly designed stranded cost recovery will not affect the way in which competition drives forward-looking costs and generation prices.

Q. SEVERAL WITNESSES ADVOCATE THAT STRANDED COST RECOVERY BE SHARED BETWEEN RATEPAYERS AND STOCKHOLDERS. DO YOU THINK THAT THIS RECOMMENDATION IS REASONABLE?

A. No. "Sharing" of stranded cost recovery is simply a euphemism for saying that regulators should not honor their commitments and should deny recovery of prudently incurred costs. As I have noted, utilities are entitled to an opportunity to recover 100% of their stranded costs. The only relevant questions are whether the costs associated with the strandable assets were approved by the regulator for inclusion in the rate base and whether the assets will be stranded due to a change in public policy. If the answers to both of these questions are in the affirmative, as they are in this case, then the utility should be afforded a

meaningful opportunity to recover all of the costs associated with that asset. The assets in question have been approved by the ACC for inclusion in TEP's rate base, and the assets become stranded only when retail choice occurs, which will be the result of a conscious policy decision to allow choice.

The risk associated with invested capital has been shared between ratepayers and shareholders already. Shareholders are at risk that investments will not be approved by regulators for recovery and they are at risk for changes in supply and demand conditions and technology that occur independent of changes in policy. Ratepayers are at risk for investments that were approved for recovery by regulators and that are negatively impacted by a change in policy. It is this latter category that forms the basis for stranded costs, and some witnesses would now have risk divided again between ratepayers and shareholders, even though shareholders were not compensated for that risk.

It is interesting to note that Dr. Rosen, who advocates a 50/50 sharing of stranded cost recovery between ratepayers and shareholders, argues that 100% of any negative stranded costs should be returned to ratepayers. If ratepayers are entitled to all of the rewards associated with any negative stranded costs that may arise, as I believe they are, then the same reasoning leads to the conclusion that they also are responsible for the risk associated with positive stranded costs.

I realize that proposals to share the responsibility for stranded cost recovery 50/50 between ratepayers and shareholders have a seemingly intuitive "split the baby" appeal to them, but these proposals are not derived from a reasonable reading of the historic record and the precedent established over many years of traditional ratemaking. Splitting the difference is not justice when anything less than an opportunity to recover 100% of stranded costs represents an abrogation of existing commitments.

Mr. Higgins contends that the Commission should be concerned with allocating risk between ratepayers and shareholders in the transition to competition in generation (Higgins Testimony, p. 7, lines 6-12). I submit that the Commission should ensure that all of the going-forward risk associated with generation should be borne by shareholders (and,

consequently, all of the going-forward rewards as well), but that stranded cost recovery represents nothing more than an accounting for past risks that ratepayers accepted under traditional cost-of-service regulation. It is worth repeating again that I do not endorse the regulatory compact as something that should be sustained as part of the new environment: on the contrary, getting rid of the regulatory compact is one of the benefits of introducing competition. But my desire to see the regulatory compact fade into history does not extend to ignoring past commitments that were made under that compact.

Q. SOME WITNESSES ARGUE THAT UTILITY SHAREHOLDERS HAVE BEEN ADEQUATELY COMPENSATED FOR THE RISK THAT STRANDED COSTS WOULD NOT BE RECOVERABLE. DO YOU AGREE?

A. I certainly disagree in terms of my own eight-year experience as a state regulator, though I have no knowledge about how risk was factored into the cost of capital determinations of the ACC. In the numerous rate cases in which I participated, compensation to the shareholders for the risk that a policy determination would strand prudently incurred costs was not included in the allowed rate-of-return. Indeed, to the best of my recollection, it was never raised or discussed. Moreover, I do <u>not</u> believe that utility investments are risk free - as Dr. Rose claims that I assert (Rose Testimony, p. 6, lines 1-2) - and I never approved a risk-free rate-of-return as a regulator, either for debt or equity, but the risk that shareholders have accepted and were compensated for does not include the risk of regulators acting opportunistically.

Q. DR. COOPER CONTENDS THAT YOUR POSITION ON STRANDED COST RECOVERY IS BASED ON A FUNDAMENTAL MISCHARACTERIZATION OF RISK AND REWARD UNDER REGULATION (COOPER TESTIMONY, P. 20, LINES 14-15.). WHAT IS YOUR RESPONSE?

A. Well, I would first note that the same conclusion on stranded cost recovery has been reached by the FERC, the President's Council of Economic Advisers, and most of the state legislatures and utility commissions who have looked at the issue. Second, in support of his contention Dr. Cooper asserts that utility rates are set based on averages and utilities can

earn more than their approved return in some years and less in others (Cooper Testimony, p. 21, lines 1-8). Frankly, I do not see how this demonstrates that there is not a risk/reward symmetry in traditional regulation. He suggests that there is a structural bias in favor of utilities, but he does not support this suggestion with any evidence, so it is difficult to assess whether his supposition is correct.

Lastly, Dr. Cooper argues that symmetry is broken because regulators cannot set rates retroactively to capture the above-average profits in "good" years (Id., lines 9-18). But the same holds true for "bad" years - the regulator still cannot set rates retroactively to compensate the utility for the results of the bad year. If anything, I believe that Dr. Cooper's examples in this respect are helpful in demonstrating the risk/reward symmetry inherent in the traditional approach to regulation.

Q. THE ACC STAFF RECOMMEND AGAINST THE USE OF SECURITIZATION AS A MEANS TO MITIGATE STRANDED COSTS (COOPER TESTIMONY, PP. 24-26). WOULD YOU PLEASE COMMENT ON THEIR CRITICISMS?

A. Certainly. Assuming the Commission does not change its conclusion that utilities should be allowed an opportunity for full stranded cost recovery, securitization is simply a way to convert a portion of those stranded costs into a marketable security. Because the security would be irrevocable (unlike recovery in the regulatory arena, which is always subject to political pressures and changes in the Commission itself), investors are likely to require a smaller risk premium and thus the capital carrying costs could be lower. Lower capital costs reduce the total stranded costs that customers must pay for. Dr. Cooper criticizes securitization on the grounds that 1) it may result in over-recovery of stranded costs, and 2) it results in a large infusion of cash to the utility, which can then use that money to restrict competition.

With respect to his first criticism, securitization usually is restricted to less than 100% of stranded costs, which allows any discrepancies to be adjusted. In fact, TEP's proposal is to securitize only 75% of stranded costs. Also, even if 100% of stranded costs were to be securitized, the transition charge or other stranded cost recovery mechanism can be subject

to a "true-up" mechanism that would prevent over-recovery. In my view, the most significant factor in deciding whether or not to use securitization is whether significant cost savings are likely to result.

In terms of Dr. Cooper's second criticism, suffice it to say that having a source of funds to "spend" anticompetitively does not mean that the utility can act anticompetitively. This is simply a variant of the old – and discredited – "deep pocket" theory of predation. Generally, the utility will invest securitization proceeds wherever it sees the highest potential return from those proceeds. This may or may not be the generation business. Moreover, with open entry a reality in generation, there is little or no likelihood of recovering in the future any predatory "investments" that the firm makes. Finally, antitrust laws and ACC oversight will work to ensure that the utility does not act anticompetitively in the generation market.

Q. DR. COYLE RECOMMENDS THAT THE COMMISSION SHOULD MAINTAIN OR ADOPT A "BROAD SCOPE OF REVIEW" OF THE UTILITY'S NON-REGULATED BUSINESSES AND THAT IT SHOULD "CAPTURE, AS APPROPRIATE, GAINS FROM NON-UTILITY ENTERPRISES" (COYLE TESTIMONY, PP. 8-9, AND 40). PLEASE COMMENT ON THIS RECOMMENDATION.

A. The irony of Dr. Coyle's recommendation for the Commission to have a broad scope of review of the utility's non-regulated businesses and to capture the gains from those businesses is that it would extend ratepayer risk from utility operations to more risky unregulated operations. As I have mentioned, one of the benefits of introducing competition is to avoid future stranded cost problems by shifting risk prospectively from ratepayers to shareholders. If the Commission seeks to capture gains from unregulated operations, it must also cover losses in unregulated operations, and I do not think that replicating the mistakes of the past is an appropriate step to take in the transition to competition. The regulators' goal in terms of affiliate relations generally is to ensure that ratepayers are not cross-subsidizing competitive, unregulated ventures. It is also important to ensure that the competitive ventures do not subsidize ratepayers.

IV. THE IMPACT OF STRANDED COST RECOVERY ON EFFICIENT COMPETITION

Q. WILL STRANDED COST RECOVERY HARM THE OPERATION AND DEVELOPMENT OF A COMPETITIVE MARKET FOR ELECTRICITY GENERATION SERVICES?

A. No, not if it is done correctly. Stranded cost recovery can be achieved in ways that have virtually no impact on efficient, going-forward competition in the generation market. Indeed, avoiding deleterious effects on the new generation market is one of the most important goals established by policy-makers in those states that have made significant progress toward the creation of a competitive electricity market.[4] Policy-makers in these states have recognized that, whatever has happened in the past, the generation market should be unhindered on a going-forward basis. Stranded cost recovery can and has been designed in such a way as to allow the market to clear the price for generation. The "net revenues lost" approach is one such way to accomplish this goal.

Q. HOW HAVE OTHER STATES ACHIEVED STRANDED COST RECOVERY WITHOUT HARMING COMPETITION?

A. While the details of the specific stranded cost recovery mechanisms vary, they generally are designed to operate independent of the generation market (*i.e.*, they are competitively neutral). To date, states that have made significant progress toward implementing competition in electricity have arranged for stranded costs to be recovered via some form of a non-bypassable, competitively-neutral "wires" or "competitive transition" charge.[5] In this way, the utilities operations in the competitive generation market are faced with the same stranded cost recovery burdens as alternatives.

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[4] These states include California, Massachusetts and Pennsylvania, as well as others.

[5] Many of the other witnesses in this proceeding are agreed on this point. For example, "The transition charge is most effectively levied as a 'wires' charge on distribution service, which is where the Commission has clear jurisdiction." (Higgins, page 30). See also Malko, page 11 and Rosen, pages 68 and 77.

Q. YOU HAVE SAID THAT RECOVERY OF STRANDED COSTS CAN BE ACHIEVED IN A MANNER THAT WILL NOT HARM THE EFFICIENCY OF THE MARKET. HAVE OTHER WITNESSES IN THIS CASE TAKEN AN OPPOSITE POSITION?

A. For the most part, the other witnesses seem to recognize that stranded cost recovery can be arranged in a way that will not harm competition.[6] However, Dr. Rose and Dr. Cooper have asserted that allowing stranded cost recovery will harm the market in several ways.

Dr. Rose's assertions include:[7]

- Stranded cost recovery will form a barrier to entry for new generators;
- Stranded cost recovery will form a barrier to exit for existing utility generation plants;
- Stranded cost recovery will create a moral hazard problem regarding utility efforts to mitigate stranded costs;
- Stranded costs have no bearing on uneconomic bypass;
- Stranded cost recovery will create an asymmetry of risk and reward for utility earnings; and
- Stranded cost recovery will provide an unfair advantage to incumbents.

These assertions are unconvincing. For the most part, they are based on "straw-man" arguments.

Q. WHAT IS THE NATURE OF DR. ROSE'S STRAW-MAN ARGUMENTS?

A. Dr. Rose apparently assumes that the Commission will design an inferior stranded cost recovery mechanism that will not be competitively neutral (Rose Testimony, p. 9, lines 16-19). He then points to the inevitable failures of that poorly designed recovery mechanism and rejects recovery absolutely on the basis of the straw-man's poor performance. He gives no indication that he is aware that the design of competition-neutral stranded cost recovery

[6] For example, regarding the impact of stranded costs recovery on the effectiveness of competition, "I believe there will be no impact . . . if recovery is made through a non-bypassable wires charge." Rosen p. 78

[7] Direct Testimony of Dr. Kenneth Rose, pp. 9-17.

mechanisms has been an important matter of policy in the other states that have made significant progress toward implementing competition in electricity. He offers no discussion of the ways that other states have dealt with these same issues. He seems to believe - contrary to what can be shown with easily available evidence - that these problems are unavoidable. While it is certainly possible to design a recovery mechanism that harms competition, I see no reason to conclude (as Dr. Rose appears to) that Arizona will make this mistake while other states have avoided it.

Q. PLEASE COMMENT ON DR. ROSE'S CLAIM THAT STRANDED COST RECOVERY WILL CREATE "BARRIERS TO ENTRY."

A. The term "barriers to entry" is economics jargon for uneconomic conditions not related to genuine efficiency advantages that give an unfair advantage to incumbent firms in a market. They are "[f]actors which place new entrants at a cost disadvantage relative to established firms within an industry."[8] With the existence of significant barriers to entry that do not arise from real economic advantages, it is possible for existing firms to charge prices that are above marginal cost.

Q. DOES STRANDED COST RECOVERY CREATE A BARRIER TO ENTRY?

A. No. Stranded cost recovery would form a barrier to entry only if it were levied selectively on customers of new entrants to the market, while customers of the incumbent utility were allowed to escape these costs. This matter has received attention in those states that have made significant progress toward competition and appears to be well understood by several other witnesses in this proceeding. For example,

> I ... believe that use of a wires charge paid by all customers of the distribution utility as part of a proper unbundling of rates will solve this problem. (Footnote: Thus far, all states have taken this approach.) The wires charge should be applied by the local distribution company, and therefore stranded costs would be allocated to all customers being served by the local distribution system. Both standard offer customers and those being supplied by alternative suppliers as a

[8] *The MIT Dictionary of Modern Economics*, 4th Edition, 1992.

> result of competition will pay for stranded costs on an equitable basis due to a wires charge. (Rosen, p. 77.)

Q. DR. ROSE ASSERTS THAT STRANDED COST RECOVERY CREATES A "BARRIER TO EXIT" FOR INEFFICIENT PLANTS (I.E., THOSE WHOSE OPERATING COSTS ARE GREATER THAN THE MARKET VALUE OF THEIR OUTPUT). PLEASE COMMENT.

A. The term "barriers to exit" is more economics terminology that describes situations where entrants to a market face significant sunk costs. Costs are "sunk" when, once committed to a particular use, they cannot be converted to another use. Substantial sunk costs are common to many capital-intensive industries and they can have important implications for market structure. When barriers to exit (*i.e.*, sunk costs) are high, a market will not experience "quick hit" entry and exit. For example, it requires a great deal of capital to construct a new paper mill and once the mill is built, the capital cannot be easily converted to any other use. As a result, the price of paper may rise far above short-run marginal cost before manufacturers finally decide to commit the capital required to enter the market.

This can be contrasted with, for example, some segments of the retailing sector. Many stores can quite easily change their line of merchandise in response to changing market conditions. Stores that stocked their shelves with Tickle-Me-Elmo last year are likely to be selling Beanie Babies this year.

Q. IS DR. ROSE CORRECT IN ASSERTING THAT STRANDED COST RECOVERY CREATES A BARRIER TO EXIT?

A. No. Dr. Rose's comments are difficult to interpret. He says,

> Inefficient suppliers are encouraged to continue to operate inefficient plants. In this way recovery of uneconomic costs acts as a barrier to exit from the market when it would otherwise be economic to do so. (page 9.)

Dr. Rose's use of the term "barrier to exit" bears no resemblance to the use of the term in mainstream economic literature. To a large degree, *all* entrants into the electric generation market will face significant barriers to entry and exit because they will be required to make

large sunk cost investments in order to enter. In the event they cannot operate these plants at a profit, they will not be able to easily recover their capital or to convert it to alternative uses. For practical purposes, capital invested in the electricity industry will remain there, whether or not the investment proves to be profitable.

Barriers to exit have no bearing on the issue of stranded cost recovery, except perhaps to offer support for the argument that given regulatory requirements to price at marginal cost, utilities would not have undertaken large sunk-cost investments in anticipation of demand growth if they did not believe there was a contract or compact of some sort which protected their capital. By contrast, investors build paper mills because they know they will be able to charge very high prices when there are shortages of paper in the market. If the government were to impose regulations forbidding paper manufacturers from earning "excessive" profits, we might find that no new paper mills would be built—unless the government also saddled paper manufacturers with an "obligation to serve."

A second confusing point in Dr. Rose's statement is his assertion that allowing an opportunity for stranded cost recovery would lead to utilities' continuing to operate inefficient plants. (This matter has nothing to do with the economic concept of "barriers to exit.") That is, Dr. Rose seems to believe that a utility would continue to operate a generation plant even if the plant cost more to operate than it was able to earn in the market. This may have been true under traditional regulation, where the "used and useful" standard could have provided an incentive to keep uneconomic plants in operation, but it certainly will not apply in the deregulated generation market of the future.

On the other hand, Dr. Rose may assume that Arizona's stranded cost recovery mechanism will be so poorly designed that it will require specific plants to run, regardless of their relative competitiveness. This is another straw-man. Most parties to this proceeding seem to understand that what matters is making sure that generators compete on a going-forward basis. For example:

> Stranded cost does not include any operating cost. If a facility's operating costs can not be recovered in a competitive market, economic rationality dictates that the facility be shut down. (Higgins, p. 5.)[9]

Q. PLEASE EXPLAIN THE TERM "MORAL HAZARD" IN THE CONTEXT OF STRANDED COST RECOVERY.

A. Moral hazard is economic jargon for the phenomenon that people with insurance are more likely to engage in risky behavior. In this case, Dr. Rose asserts that allowing a utility to recover its stranded costs will remove any incentive the utility would otherwise have to mitigate stranded costs.

Q. DOES STRANDED COST RECOVERY CREATE A MORAL HAZARD PROBLEM?

A. No. A properly designed stranded cost recovery mechanism will not lead to a moral hazard problem. However, a poorly designed mechanism, such as Dr. Rose assumes will be implemented in Arizona, could create a moral hazard problem. For example, if the utility received an iron-clad guarantee of recovering all stranded costs, rather than just an opportunity, it might have less incentive to mitigate stranded costs. Less mitigation effort by the utility would lead to higher costs for customers. Of course, failing to control costs as you are heading into a competitive setting would - or should - be at least as great a concern to shareholders as it is for customers. The potential for moral hazard has been recognized and addressed in those states that have made significant progress toward implementing competition in electricity. Other witnesses in this case seem well aware of this fact. For example,

> The most efficient approach to mitigation would be one in which the utility was at risk for a portion of its potentially stranded cost, and stood to gain financially when its mitigation actions were successful. (Higgins, p. 31.)

Q. PLEASE COMMENT ON DR. ROSE'S CLAIM THAT STRANDED COST RECOVERY WILL CREATE AN ASYMMETRY OF RISK AND REWARD.

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[9] However, as noted in the Direct Testimony of Charles E. Bayless (p. 13, lines 4-5), there may be some generation-related operating costs that should appropriately be included as potentially stranded costs.

A. Dr. Rose says:

> Recovery of uneconomic costs can distort the competitive market because of an asymmetry of risk and reward that is created....[W]ith recovery, an affected utility is compensated for investments that turn out to be uneconomic; but for utilities that have competitive gains, there is no mechanism being proposed to pay the gains back to ratepayers. When calculating uneconomic costs, it is good practice to determine the net amount by offsetting losses with the gains. However, if a utility has a net gain, there is no mechanism to return it back to ratepayers. In effect, only losses are compensated. (page 10.)

I have two comments on Dr. Rose's statement. First, he is making another straw-man argument. The use of negative stranded costs to offset positive stranded costs is referred to as "netting." Dr. Rose appears to believe that there will be no netting in Arizona and concludes that because there will be no netting policy, stranded cost recovery should be disallowed. I see no reason to agree with his presumption that there will be no netting policy in Arizona. Consequently, I see no merit in his position that stranded cost recovery should not be allowed because of the absence of netting.

Second, although I agree that some sort of netting policy is appropriate, I do not agree with Dr. Rose's assertion that the lack of netting will distort the market. As I have explained above, and as is generally well accepted in electricity restructuring debates in other states, efficiency can only be achieved on a going forward basis. Positive and negative stranded costs are based on sunk costs which are by their nature historical and beyond the power of the utilities and the Commission to make more or less efficient. The treatment of positive and negative stranded costs is crucial for purposes of ensuring fairness and the long-term efficiency of a market economy based in part on government commitments, but it does not impact the ability of the market to clear a forward-looking price for generation.

Q. IN YOUR TESTIMONY YOU EXPLAIN THAT THE THREAT OF UNECONOMIC BYPASS MUST BE CONSIDERED IN DESIGN OF A STRANDED COST RECOVERY MECHANISM. DR. ROSE ASSERTS TO THE CONTRARY THAT UNECONOMIC BYPASS "IS LIKELY TO OCCUR ONLY IN A [SIC] VERY LIMITED CIRCUMSTANCES" (ROSE TESTIMONY, P. 11). PLEASE COMMENT.

A. I have two responses. First, Dr. Rose's comments are based on a misinterpretation of my testimony. I was discussing the design of stranded cost recovery mechanisms. The point that such mechanisms must be designed to avoid bypass is, I believe, uncontroversial, and, as I have shown above, it is well understood by many of the witnesses in this case.

Second, Dr. Rose seems unaware that the potential for uneconomic bypass has been recognized as a potentially significant problem in electricity restructuring for several years. For example, analysts at NRRI had the following to say in their 1994 report on retail wheeling:

> As correctly maintained by some analysts, retail wheeling in an environment of rigid or embedded-cost retail pricing could lead to uneconomic bypass. Uneconomic bypass implies that the customer switches suppliers because he gets a better deal but economic cost rises....One way to avoid these inefficiencies is to allocate a portion of the stranded-investment costs to wheeling customers. It can be shown that when this occurs a customer would only switch away from the local utility when other suppliers have lower economic costs. (*Overview of the Issues Relating to the Retail Wheeling of Electricity*, Kenneth W. Costello, Robert E. Burns, and Youssef Hegazy, NRRI, May 1994, pp. 81-82.)

Under TEP's proposal, all customers still have the option of cogeneration and other generation alternatives, but, with a competitively-neutral stranded cost charge reflecting back to the customer the utility's above-market costs, those decisions will be made efficiently based on a comparison of going-forward costs.

Q. PLEASE COMMENT ON THE CLAIM OF DR. ROSE (ROSE TESTIMONY, P. 9, LINES 14-25), DR. COOPER (COOPER TESTIMONY, P. 24, LINES 5-11), AND DR. ROSENBERG (ROSENBERG TESTIMONY, P. 7, LINES 14-21) THAT STRANDED COST RECOVERY WILL PROVIDE AN UNFAIR ADVANTAGE TO INCUMBENTS.

A. This claim is related to the "barriers to entry" assertion described above. In fact, I find just the opposite more likely to be true. The important matter here is to achieve efficiency on a going-forward basis. To deny a utility a fair chance to recover its stranded costs might seriously hamper the company's financial viability. This would give the company a serious disadvantage in a competitive market where revenues may well be volatile and bankruptcy is a realistic threat for both existing and new market participants. It would be as if the

referee were to cut the legs out from under one of the contestants immediately before crying "let the games begin!" Clearly such an act would benefit special interests in the game (such as those of the "competitors") but it would do nothing to benefit the quality or efficiency of the game itself.

Q. TO SUMMARIZE, DO YOU FIND ANY MERIT IN ASSERTIONS THAT STRANDED COST RECOVERY WILL HARM COMPETITION?

A. Only if you begin with the assumption that the ACC will handle the issue poorly, which I do not. As I noted, Dr. Rose's assertions are generally based on a "straw-man" (*i.e.*, the unjustified and unreasonable assumption that Arizona will fail in designing an equitable and competition-neutral stranded cost recovery mechanism where other states have succeeded).

Q. ARE YOU THEN SAYING THAT STRANDED COST RECOVERY WOULD HAVE ABSOLUTELY NO EFFECT ON THE DEVELOPMENT AND OPERATION OF THE GENERATION MARKET?

A. No. I am merely saying that the kinds of harm which other witnesses have discussed are without any basis in standard economic analysis. There are three types of economic efficiency: technical, allocative, and dynamic. Technical (or first-order) economic efficiency measures the value of resources expended to produce goods and services. Allocative efficiency measures the deviation of prices from incremental costs. Dynamic efficiency measures the incentive to innovate. Stranded cost recovery will undeniably have a negative impact on allocative efficiency, but it will not harm technical or productive efficiency - the benefits of which will still flow to customers.

In terms of allocative efficiency, it is true that stranded cost recovery would have the effect of slightly shrinking the market for electricity by maintaining a final product price above marginal cost. If stranded cost recovery is allowed, the final price of electricity to consumers *in the short run* will be higher than otherwise. Since demand is slightly sensitive to price, people would use less electricity than would otherwise be the case. How much less would depend on the sensitivity of demand to price (the technical economic term is "price elasticity of demand"). Economists generally accept that price elasticity of

demand for electricity - as for other products regarded as "essential" - is much lower than for many other products regarded as discretionary or nonessential.

V. CONCLUSIONS

Q. DO YOU HAVE ANY CONCLUDING REMARKS?

A. Yes. There is one final point that I would like to make about stranded cost recovery in response to the arguments and theories presented by other witnesses. It has to do with the importance of a commitment to an opportunity for full stranded cost recovery in bringing the efficiency benefits of the competitive process to Arizona consumers as quickly as possible. In pointing this out, I do not mean to suggest that stranded cost recovery is not required by an application of proper regulatory principles, but the practical consideration of achieving the ACC's policy goals as soon as possible should not be downplayed.

The Massachusetts Commission started the process of investigating the possibility of introducing competition in the generation market in early 1995 while I was Chairman of that Commission. We issued our first order in August of that year, essentially laying out the policy principles that would guide our effort. As I noted in my direct testimony, one of those policy principles was to honor existing commitments and allow an opportunity for full stranded cost recovery. An earlier round of discussion, under the auspices of a gubernatorial task force (of which I was co-chair), failed to reach consensus on how to proceed to open retail electricity markets. Divisions over stranded cost recovery were the main sticking points. It was that failure, in part, which led me to advance the notion of the utility commission enunciating a clear set of principles.

I left the Massachusetts Commission soon after the restructuring order was issued, but the effort we had started led to settlement agreements on implementation issues among most of the large investor-owned utilities, the Attorney General (the consumer advocate in Massachusetts), the governor's administration, and some environmental groups. Those settlement agreements, in turn, formed the basis for the legislation that passed late last year, which provided for retail access to begin in Massachusetts on March 1, 1998 - about a month from now. From start to finish, that effort took just about three years.

I firmly believe that the Massachusetts Commission's early and unequivocal pledge to honor existing commitments was the primary reason that customer choice will now become a reality in that state. Compare that situation to New Hampshire, which in some ways was moving faster than Massachusetts but is now mired in litigation primarily because there is not a similar commitment to an opportunity for full stranded cost recovery. The benefits of competition to New Hampshire ratepayers are being delayed as a result. The ACC - as I understand it, the only body in Arizona with the jurisdiction to bring about electric restructuring - is at a critical juncture where it can follow the New Hampshire path of litigation and delay, with little prospect of ultimately winning the battle in my opinion, or the Massachusetts path of cooperation and progress toward solving the implementation details of introducing customer choice so that the residents of Arizona can receive the benefits of competition in generation as soon as possible.